FIG. 1

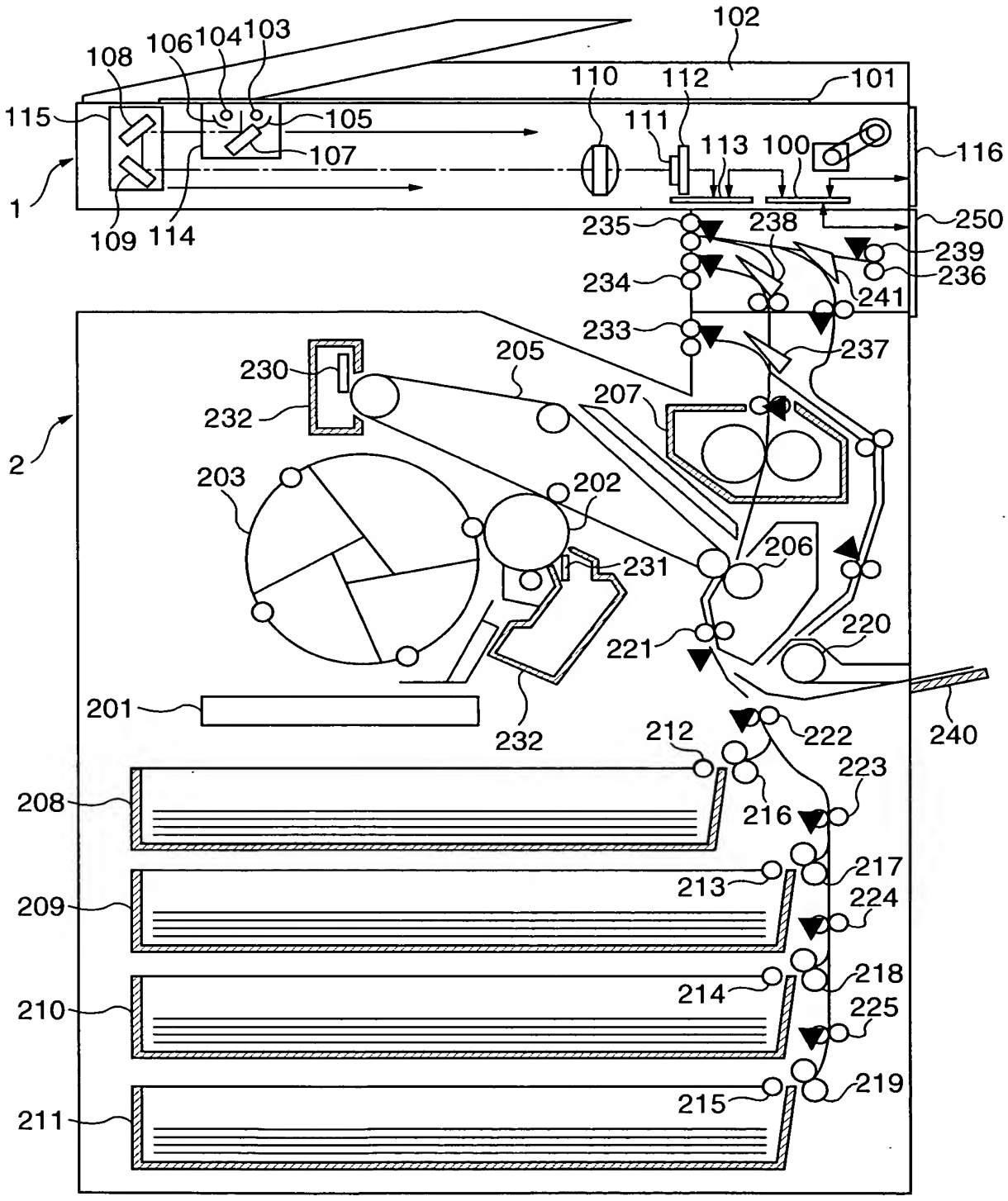

102
108
106
104
103
110
112
101
115
105
111
113
100
116
107
1
109
114
235
238
250
239
234
236
241
233
237
205
230
207
232
2
203
202
206
231
221
220
201
232
212
222
240
223
208
216
217
213
209
224
218
214
210
225
219
215
211

FIG. 2

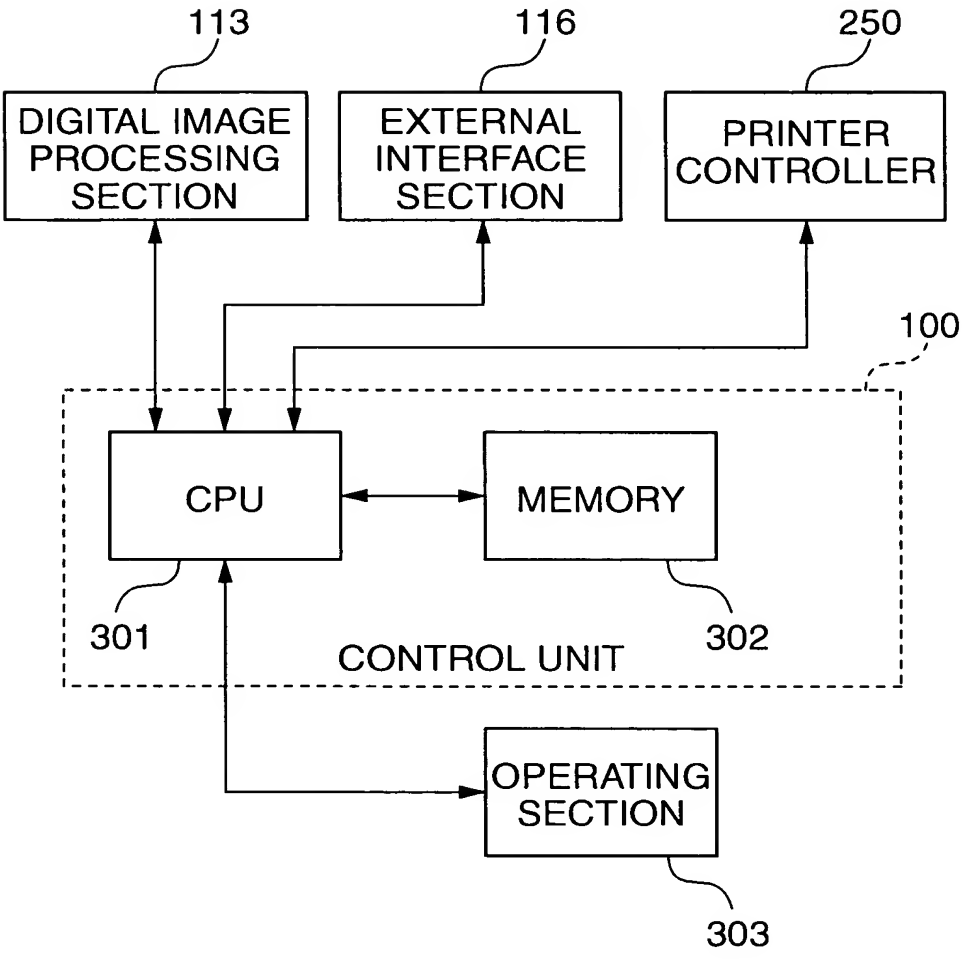

113
116
250
DIGITAL IMAGE PROCESSING SECTION
EXTERNAL INTERFACE SECTION
PRINTER CONTROLLER
100
CPU
MEMORY
301
302
CONTROL UNIT
OPERATING SECTION
303

FIG.3

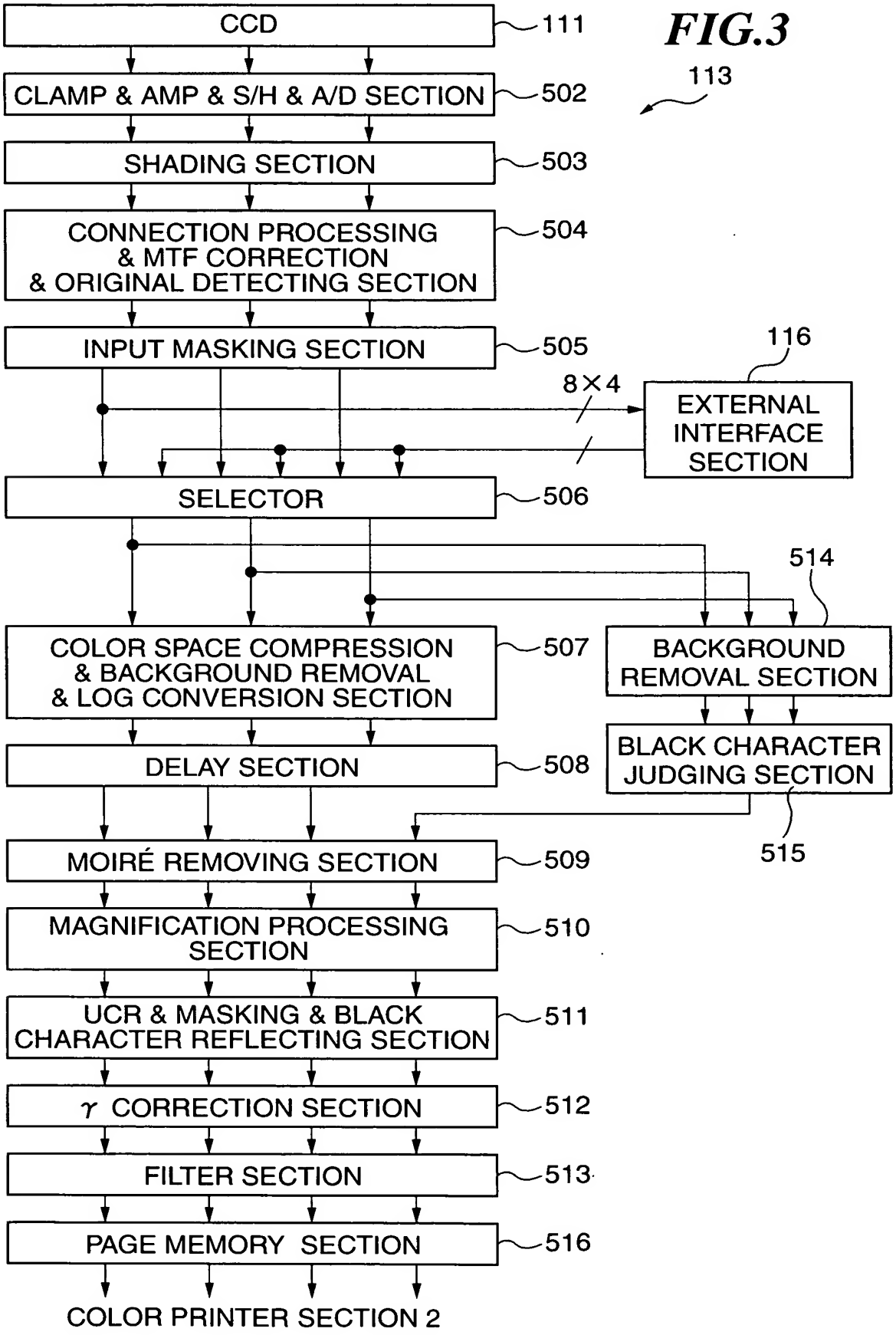

CCD
111
113
CLAMP & AMP & S/H & A/D SECTION
502
SHADING SECTION
503
CONNECTION PROCESSING
& MTF CORRECTION
& ORIGINAL DETECTING SECTION
504
INPUT MASKING SECTION
505
116
8×4
EXTERNAL
INTERFACE
SECTION
SELECTOR
506
514
COLOR SPACE COMPRESSION
& BACKGROUND REMOVAL
& LOG CONVERSION SECTION
507
BACKGROUND
REMOVAL SECTION
DELAY SECTION
508
BLACK CHARACTER
JUDGING SECTION
515
MOIRÉ REMOVING SECTION
509
MAGNIFICATION PROCESSING
SECTION
510
UCR & MASKING & BLACK
CHARACTER REFLECTING SECTION
511
γ CORRECTION SECTION
512
FILTER SECTION
513
PAGE MEMORY SECTION
516
COLOR PRINTER SECTION 2

FIG. 4

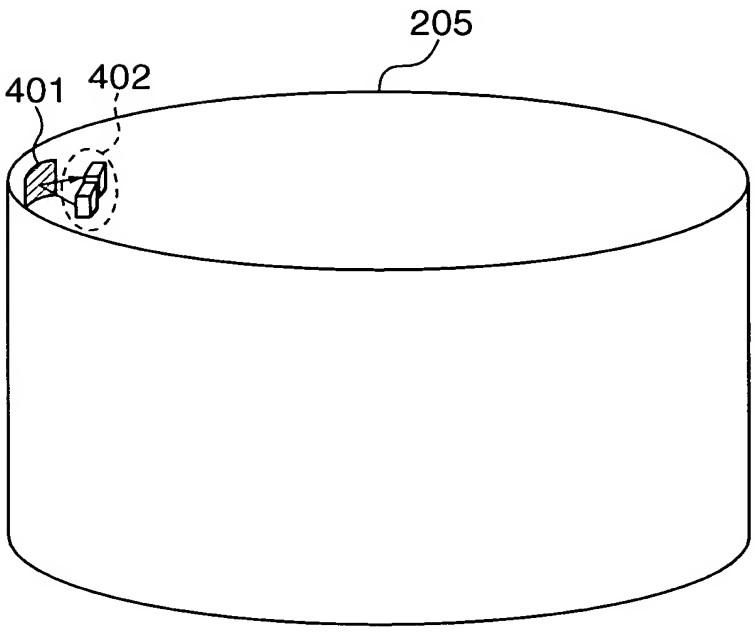


FIG. 5

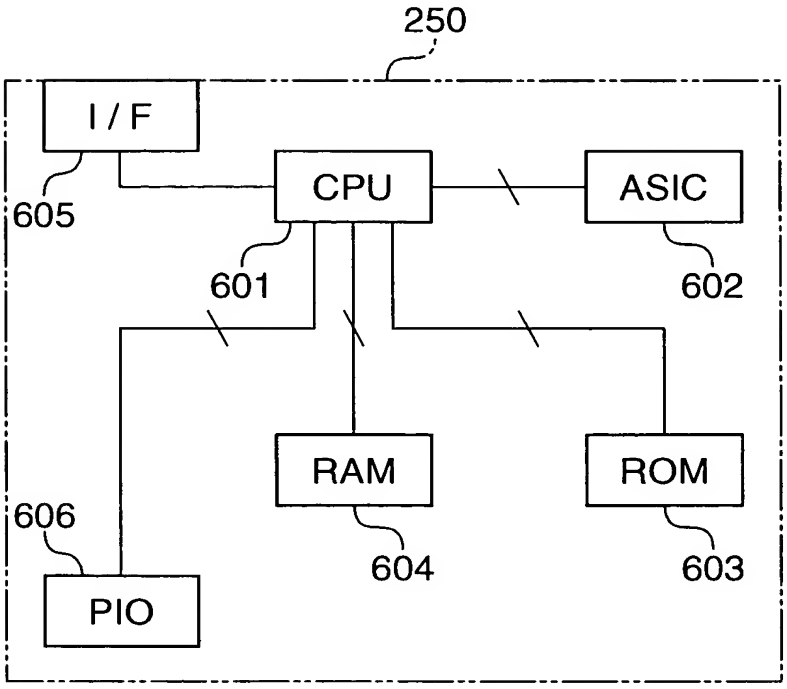


FIG. 6

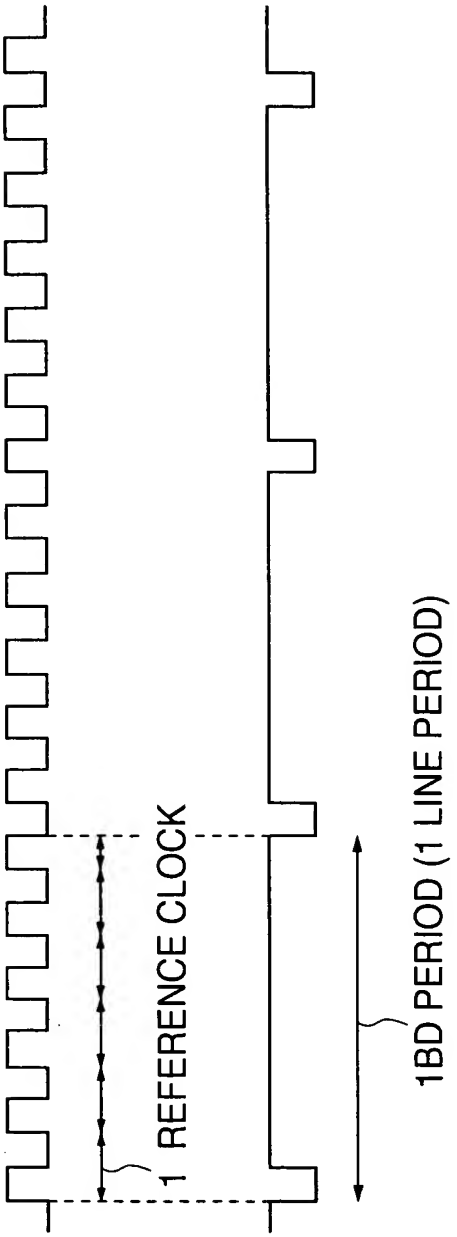


FIG. 7

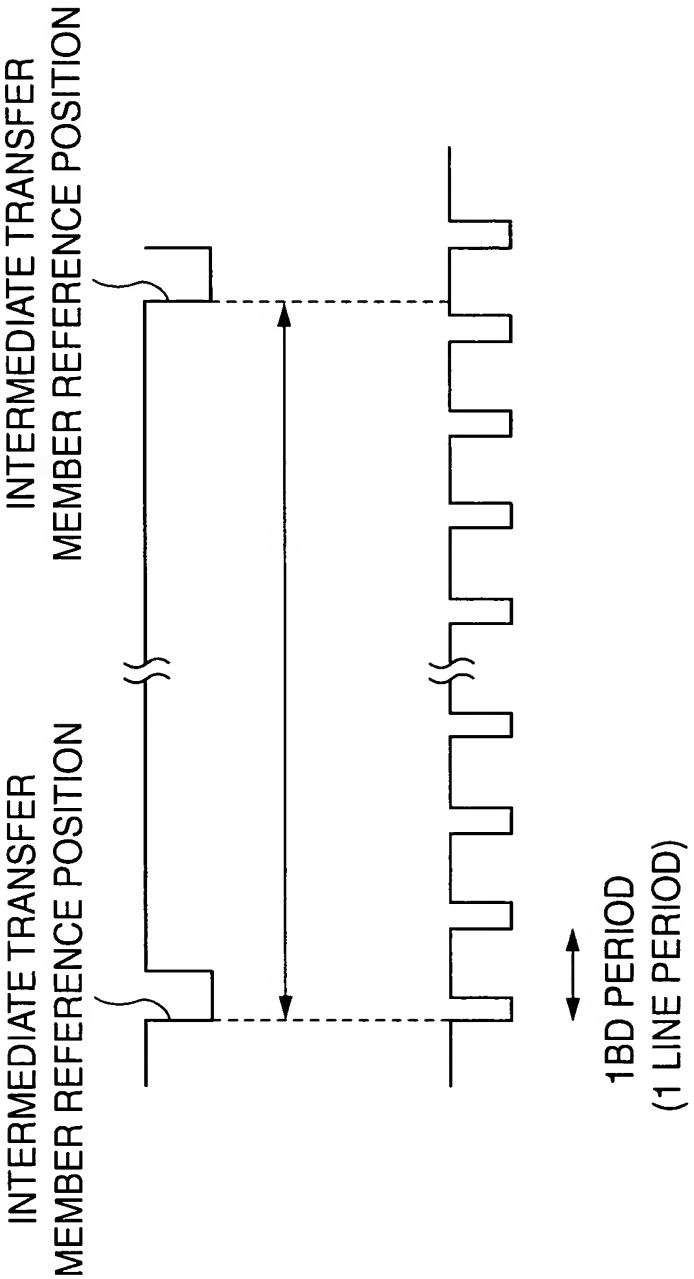

INTERMEDIATE TRANSFER MEMBER REFERENCE POSITION
INTERMEDIATE TRANSFER MEMBER REFERENCE POSITION
1BD PERIOD (1 LINE PERIOD)

FIG. 8

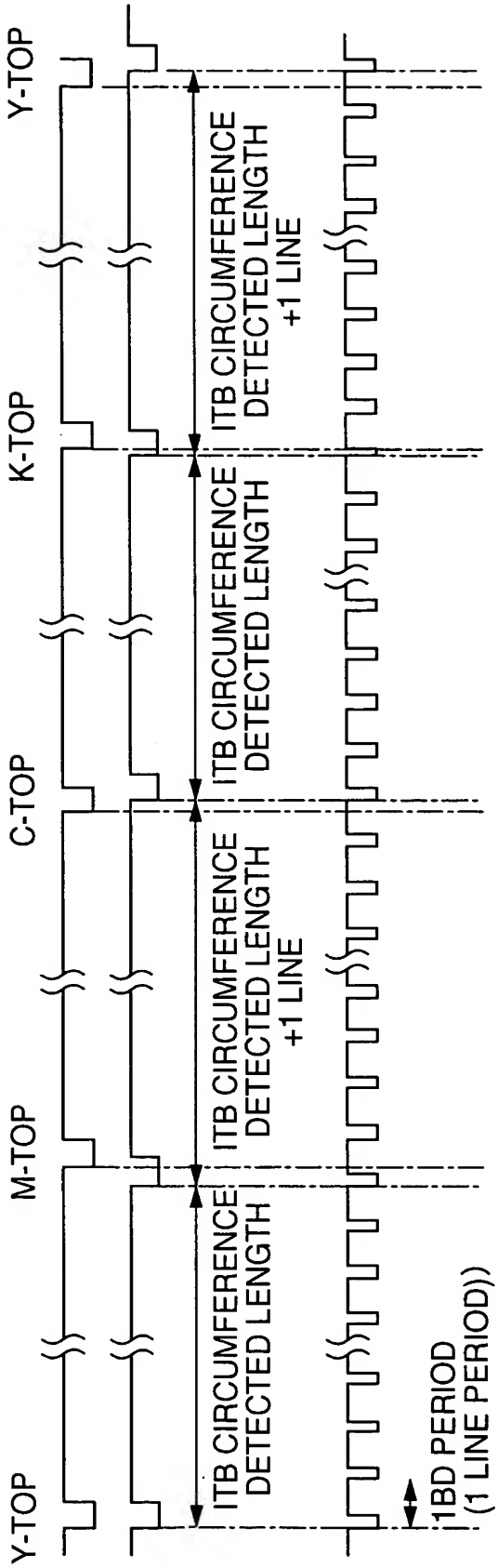
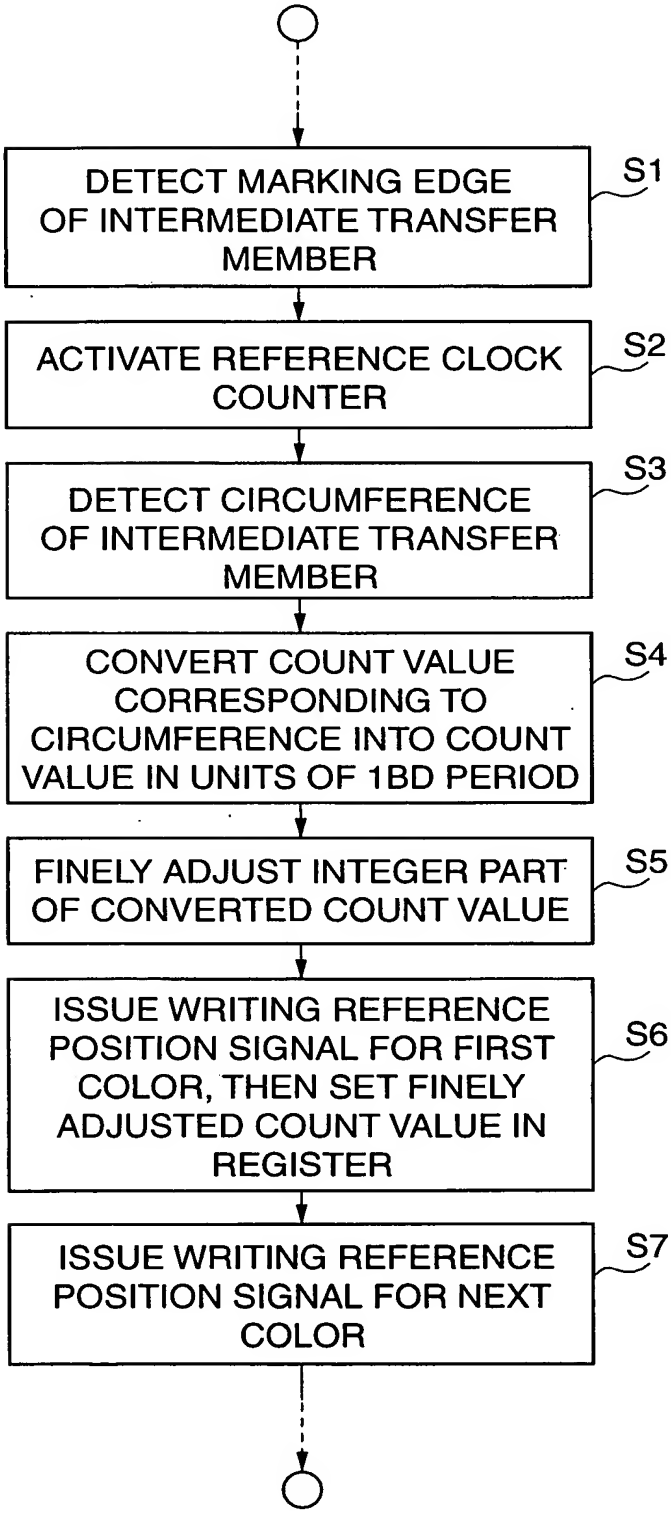

Y-TOP
K-TOP
C-TOP
M-TOP
Y-TOP
ITB CIRCUMFERENCE DETECTED LENGTH +1 LINE
ITB CIRCUMFERENCE DETECTED LENGTH
ITB CIRCUMFERENCE DETECTED LENGTH +1 LINE
ITB CIRCUMFERENCE DETECTED LENGTH
1BD PERIOD (1 LINE PERIOD))

FIG. 9


DETECT MARKING EDGE OF INTERMEDIATE TRANSFER MEMBER
S1
ACTIVATE REFERENCE CLOCK COUNTER
S2
DETECT CIRCUMFERENCE OF INTERMEDIATE TRANSFER MEMBER
S3
CONVERT COUNT VALUE CORRESPONDING TO CIRCUMFERENCE INTO COUNT VALUE IN UNITS OF 1BD PERIOD
S4
FINELY ADJUST INTEGER PART OF CONVERTED COUNT VALUE
S5
ISSUE WRITING REFERENCE POSITION SIGNAL FOR FIRST COLOR, THEN SET FINELY ADJUSTED COUNT VALUE IN REGISTER
S6
ISSUE WRITING REFERENCE POSITION SIGNAL FOR NEXT COLOR
S7